

COMMENTS – MOBILE BROADBAND MEASUREMENT

CG Docket No. 09-158, CC Docket No. 98-170, and WC Docket No. 04-36

A. MEASUREMENT METRICS FOR BROADBAND SERVICES:

We would like to state at the outset of our formal comments, that ID Insight has developed a unique, patent pending solution to meet federal, state and local government agency needs for performance measurement data and analytics for the entire U.S. broadband service area.

Our solution is called BroadBand ScoutSM, and will be referred to frequently in these comments to the Federal Communications Commission (FCC). BroadBand Scout provides a solution that will substantially reduce the cost of doing performance metrics.

Many of the critical broadband measurement metrics and analytics have been included in BroadBand Scout functionality:

Usage Data: For any defined geography, whether at the state, county, census tract, census block group, ZIP code, or ZIP+4 levels, BroadBand Scout can accurately identify the overall broadband usage. In addition, BroadBand Scout can segment each type of broadband connection, including cable, DSL, fiber, satellite and wireless.

Market Share: BroadBand Scout allows the user to understand the relative market share for all competitors for any given geography in the U.S. Since the database is updated regularly, carriers can also measure changes in market share due to market forces on an ongoing basis, and target promotional efforts toward the opportunities offering the fastest payback and return on investment.

Actual Speed: BroadBand Scout provides government agencies, carriers and ISPs the ability to see the actual performance of their network. By connecting the IP address to known speed metrics, the database enables users to compare actual speeds by carrier to advertised speeds, allowing them to identify service upgrade needs earlier.

Infrastructure Deployment: BroadBand Scout allows agencies and carriers to identify areas for market expansion. For example, understanding that a particular census tract is heavily penetrated by dial-up and satellite service, coupled with particular demographics, can pinpoint specific areas as opportunities for wireless technology, and optimal location of towers.

Analytic Services/Predictive Modeling: If user needs depend on information about the existing broadband infrastructure, BroadBand Scout can help. Through customized analytic practices, our experienced associates can help implement additional analyses and metrics.

Our belief is that the measurement process and standards for mobile broadband should be the same as those for fixed connections, since for the most part, the measurement requirements are the same, as far as determining accurate, unbiased service levels for a given geographic area anywhere in the U.S.

B. USER-GENERATED AND OTHER DATA GATHERING METHODS:

THE DIFFICULTY IN GATHERING BLOCK-LEVEL BROADBAND DATA

Municipalities and other agencies have attempted to compile geographic access and usage in various ways. Already problematic, these methods (described below) are proving inadequate at providing data for granting of stimulus funding and other performance measurement purposes.

1. Self-Reported Information

There have been a variety of attempts to compile internet connectivity and usage statistics through a self-reporting mechanism. The idea is relatively simple: Use marketing campaigns to drive consumers to a website where they self-report their information. Consumers are first asked to provide their address related information, and then a computer application reads their Internet Protocol (IP) address and the speed of their connection. By doing this, the address and the connectivity information are linked and reported.

The Challenge: There is simply not enough data to make the results statistically valid. This approach must be used in combination with other reporting methods. In addition, this approach is susceptible to error. For example, the consumer could enter erroneous address data or they could enter the correct address data, but not on a computer located at that address.

2. Surveys

Another approach is to survey households in a targeted area. Strategies include phone surveys, direct mail surveys, or deploying door-knocking interviews. While these approaches can be useful at a more macro geographic level, such as the latest Internet Usage Report from the Census Bureau, it is a more rigorous and involved process when focusing on the address level.

The Challenge: Household-level surveys are time-consuming and costly. The cost of covering a county, or even an entire state could be substantial. And, the larger the area, the more time it can take to gather and compile survey results.

Also, many people don't know what kind of Internet connectivity they have available or use. Therefore, the accuracy of the survey data is questionable.

This approach must be used in combination with several others in order to ensure a complete picture. Verification is difficult. Semi-annual updates will be costly.

3. Carrier Reported Information

If carriers were required to provide their areas of coverage and subscribers, then this would arguably be the best information available, assuming it could also be independently verified.

The Challenge: For competitive reasons, carriers are not eager to share their information. Now with federal stimulus money on the line, carriers are even more protective. Because the larger carriers hold much of the data, this can create friction within the industry. Small carriers get frustrated with the creative methods larger firms use to keep their information private. Larger cable carriers may refuse to supply the information for regulatory reasons.

As a result, carrier-reported information will be incomplete and should be combined with other methods in order to get a more complete picture of broadband and internet usage.

4. Connected Nation®

On the surface, Connected Nation, a “nonprofit” backed by the largest telecommunications companies, appears to provide independent data. However, in the areas Connected Nation has mapped, community leaders and small carriers believe the data collection may be deficient, relying on data from carriers that is neither accurate nor validated. They see Connected Nation’s involvement as biased towards its carrier members. Furthermore, using Connected Nation data gives large carriers an unfair advantage, challenging stimulus grant applications from those whom they perceive as actual or potential competitors. This apparently is creating some conflict within the industry.

5. The Need For Ongoing Progress Reporting

With each of the above alternative data gathering methods, not only is the original effort costly and time consuming, but the need for ongoing semi-annual progress reporting becomes a slow and expensive process. User response to surveys, self-reporting and carrier reporting requests will be perceived as onerous, with a possible deterioration in compliance, timeliness and comparability of performance metrics. Independent verification would be required.

6. An Alternative Solution

Many of the above problems with current data gathering methods can be overcome with the deployment of the BroadBand Scout system solution on a standardized, nationwide basis. The savings of time and expense for everyone involved in the process would be substantial!

C. PUBLICATION AND COMMUNICATION:

The best method of communication to consumers is to provide both the initial and the ongoing updated performance data down to the census tract or census block group level. This should be made available on a website portal, or through other government reporting alternatives.

Assumptions and methodology should be clearly defined, to ensure credibility with consumers. Accurate and transparent communication will then bring focus to the underserved or poorly served areas.

D. CURRENT BROADBAND NETWORK PERFORMANCE AND COVERAGE DISCLOSURES:

Recently, ID Insight developed a way to compile block-level broadband data in a much more cost-effective and efficient manner. Using proprietary analytic modeling, demographic data, and retail internet order data – which includes physical and IP addresses – BroadBand Scout can see access types, transmission speeds, coverage gaps, active carriers, and more.

This new data-gathering methodology is fast, allowing carriers and agencies to complete their grant requests, or fulfill other needs for performance data. It is also cost-effective and completely impartial, two benefits that are attractive to smaller, regional carriers.

Granular-level broadband data is also important and available to providers who have requested the data to aid in identifying the highest need areas for market expansion and service upgrades in underserved areas.

Grant applicants must be able to demonstrate the current internet connectivity and usage statistics for the particular geographic area they are applying to serve. The government has outlined that grant applicants must document the connectivity and usage statistics down to the census block-number level, with independent verification, and the ability to update semi-annually.

This is a particularly granular geographic level. There are approximately 8 million unique census-block numbers in the country. Each block has fewer than 20 households on average. Because of this, many say the government's requirement falls short of asking for connectivity at the household level. Compiling the right kind of data has become a difficult, time-consuming and costly problem.

Out of necessity, the federal government has set aside \$350 million of the overall stimulus funds to cover the cost of compiling the necessary data. Carriers and municipalities are applying for this money at the same time they are gathering data and developing their grant proposals. This amount could be reduced substantially with the use of BroadBand Scout on a standardized, nationwide basis. Savings could potentially be in excess of \$100 million!

PROVIDING AN IMPROVED DATA-GATHERING METHODOLOGY

Given the problems with existing data-gathering methods, ID Insight began to explore new ways to compile the much-needed data in a more accurate, thorough, cost-effective and efficient way.

A patent-pending solution emerged that is predicated on how people use the Internet.

According to the latest Internet Usage Statistics Trends Report from Pew Internet (2009), 77 percent of all households use the Internet and 75 percent of all Internet users purchase products online.

Methodology Used by BroadBand Scout:

1. Consumers process Internet purchases and input their home/billing address with their order.
2. The retailer verifies the consumer data and captures the IP address from the transaction.
3. BroadBand Scout uses the IP address and the home/billing address to derive transmission elements, including the connection type, carrier's domain, and in most cases, the speed of the connection.
4. BroadBand Scout takes the process one step further by combining the retailer's transaction data with ID Insight's own robust sources of demographic data.
5. The processing of census block-level data is then configured for mapping. This is the critical information required by the federal government for stimulus money, and for ongoing performance reporting.

ID Insight is a data and analytics service provider to hundreds of financial services companies and retailers. As such, ID Insight has access to a significant portion of the millions of online orders placed in the U.S. each year. This information, along with the physical and IP address detail, creates a highly accurate snapshot of the U.S. landscape using the BroadBand Scout solution.

By combining patent-pending analytic modeling, demographic data, and Internet order data – which includes physical and IP addresses – BroadBand Scout can extrapolate:

- Census demographics
- Latitude/longitude coordinates
- IP address
- Connectivity type (e.g. cable, DSL wireless, satellite, dial-up, etc.)
- Carrier's domain
- Actual connection speed

This information can be provided at various levels, including state, county, census tract and census block group levels, or Zip+4 details.

E. CONCLUSION:

We believe that the FCC could substantially reduce the federal agencies' expense (FCC, NTIA and RUS) by using the BroadBand Scout patent pending system for their nationwide, ongoing performance reporting needs. This would of course also eliminate much of the time-consuming, onerous efforts required by the survey or carrier reporting processes that are currently being attempted.

Future semi-annual updates would be accurate, comprehensive, timely, verifiable, unbiased and cost-effective. BroadBand Scout would also be a cost effective, independent verification solution.